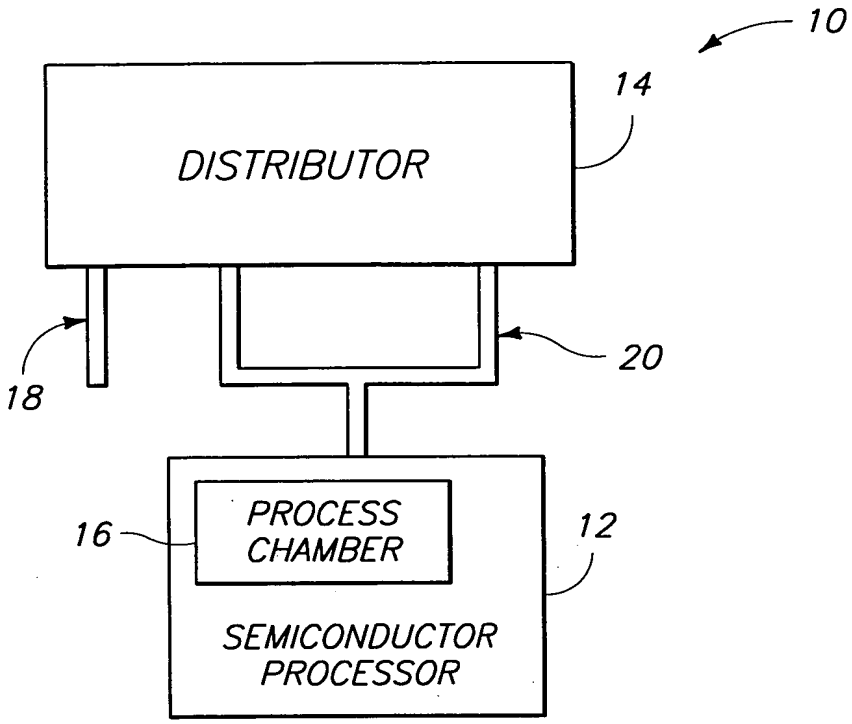


FIG 1

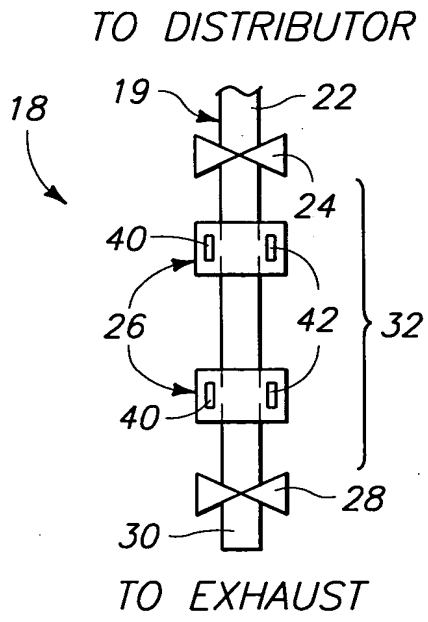


FIG 2

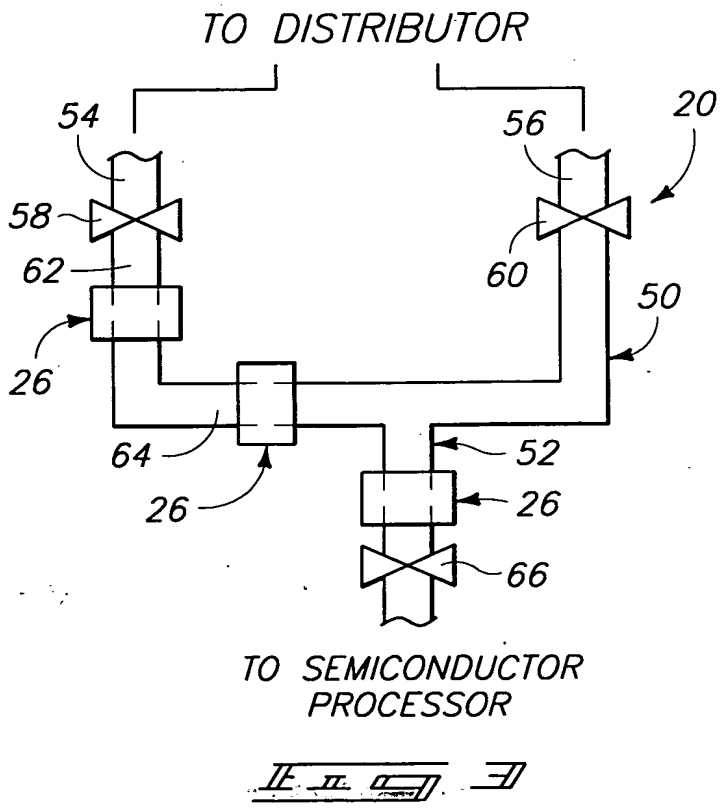


FIG 3

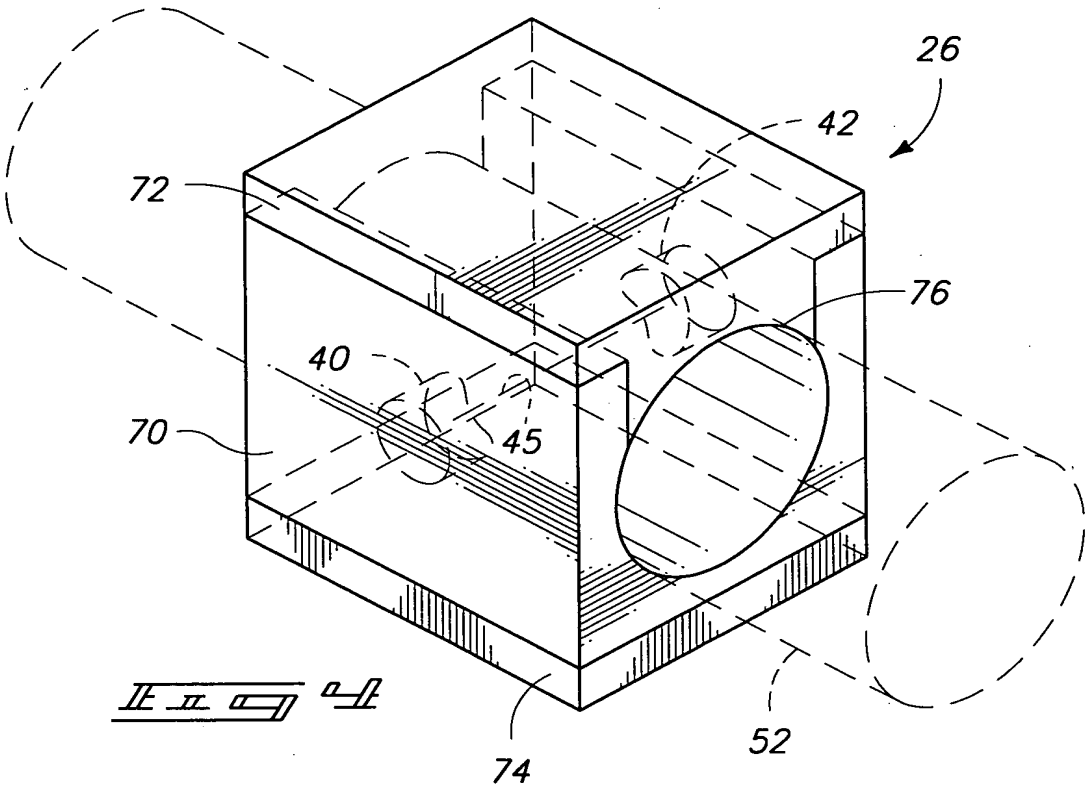

26
42
72
76
40
45
70
74
52

Fig 4

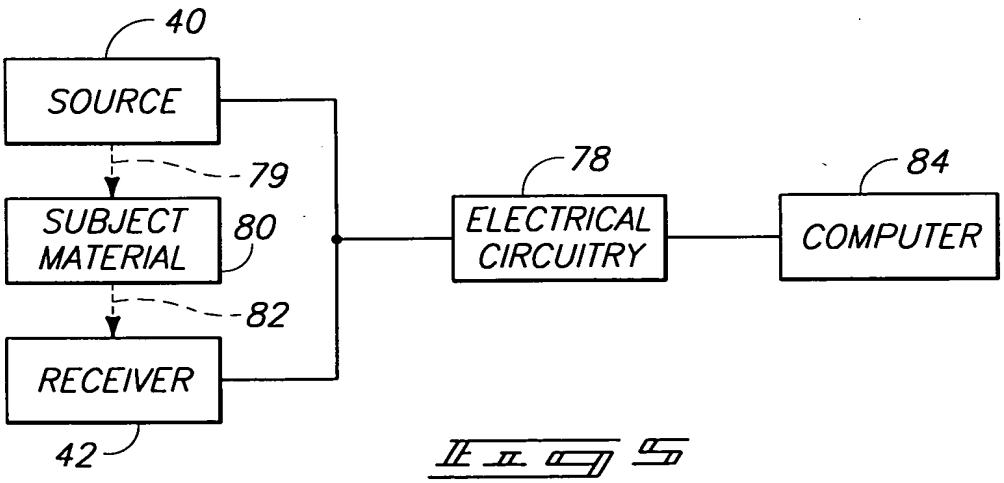

40
SOURCE
79
SUBJECT MATERIAL
80
82
RECEIVER
42
78
ELECTRICAL CIRCUITRY
84
COMPUTER

Fig 5

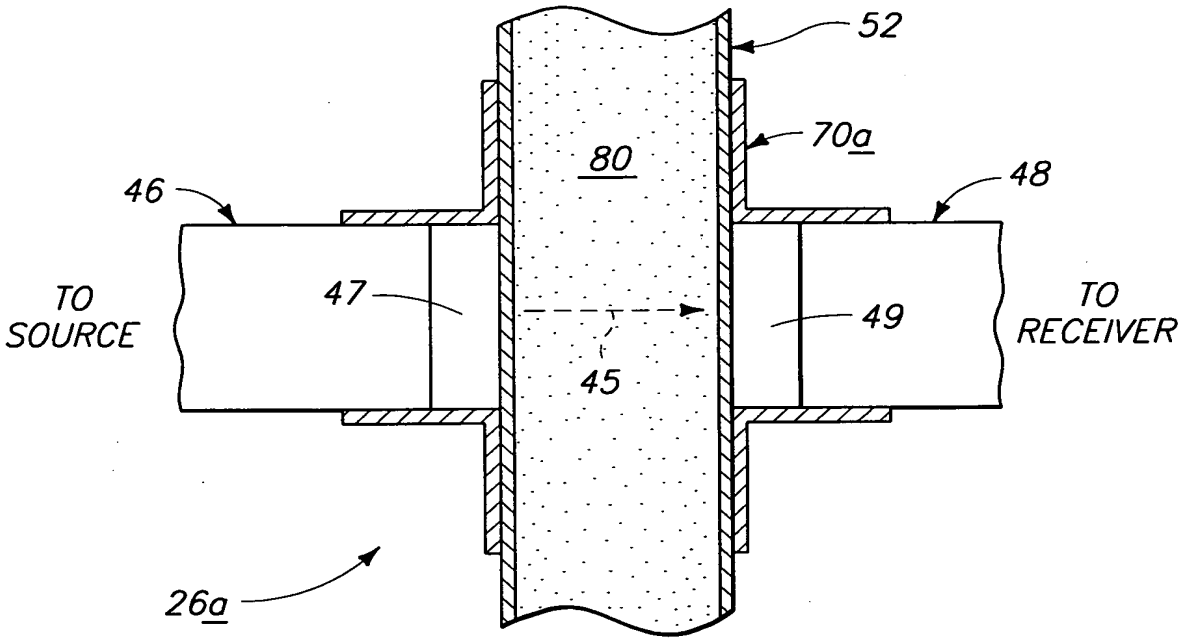

52
70a
80
46
48
TO SOURCE
47
49
TO RECEIVER
45
26a

Fig 6

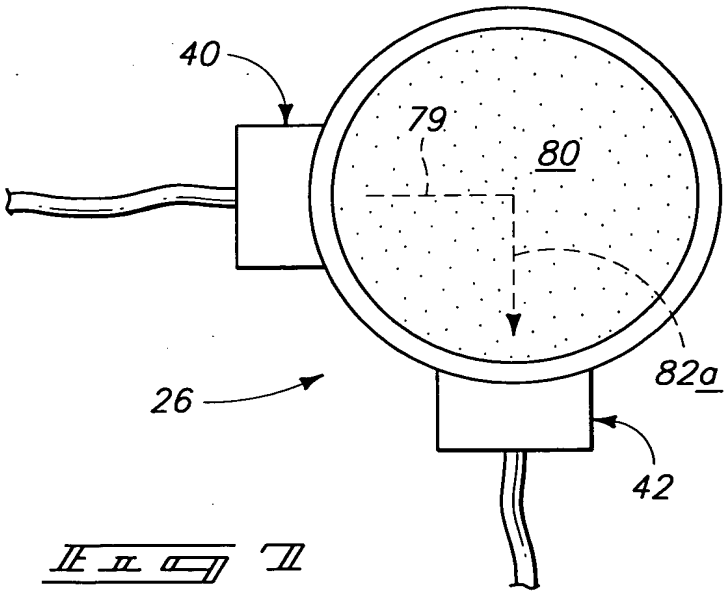

40
79
80
82a
26
42

Fig 7

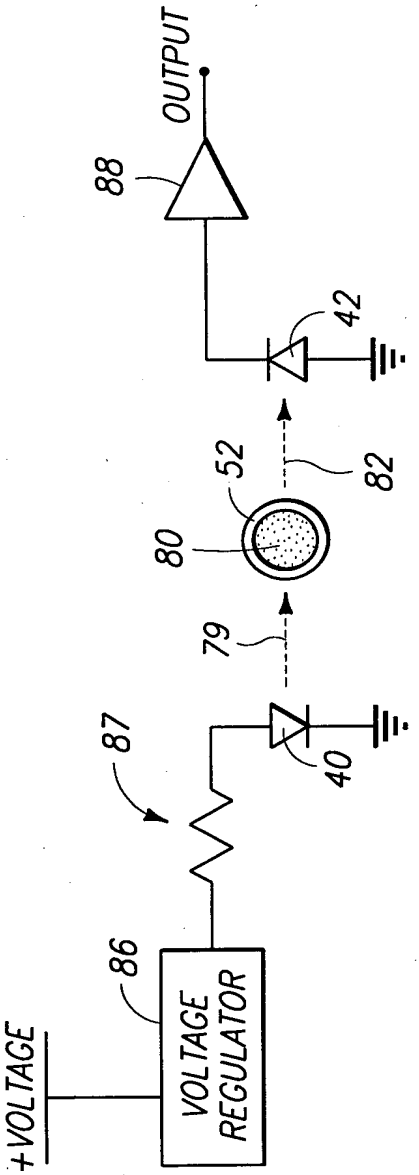


FIG 8

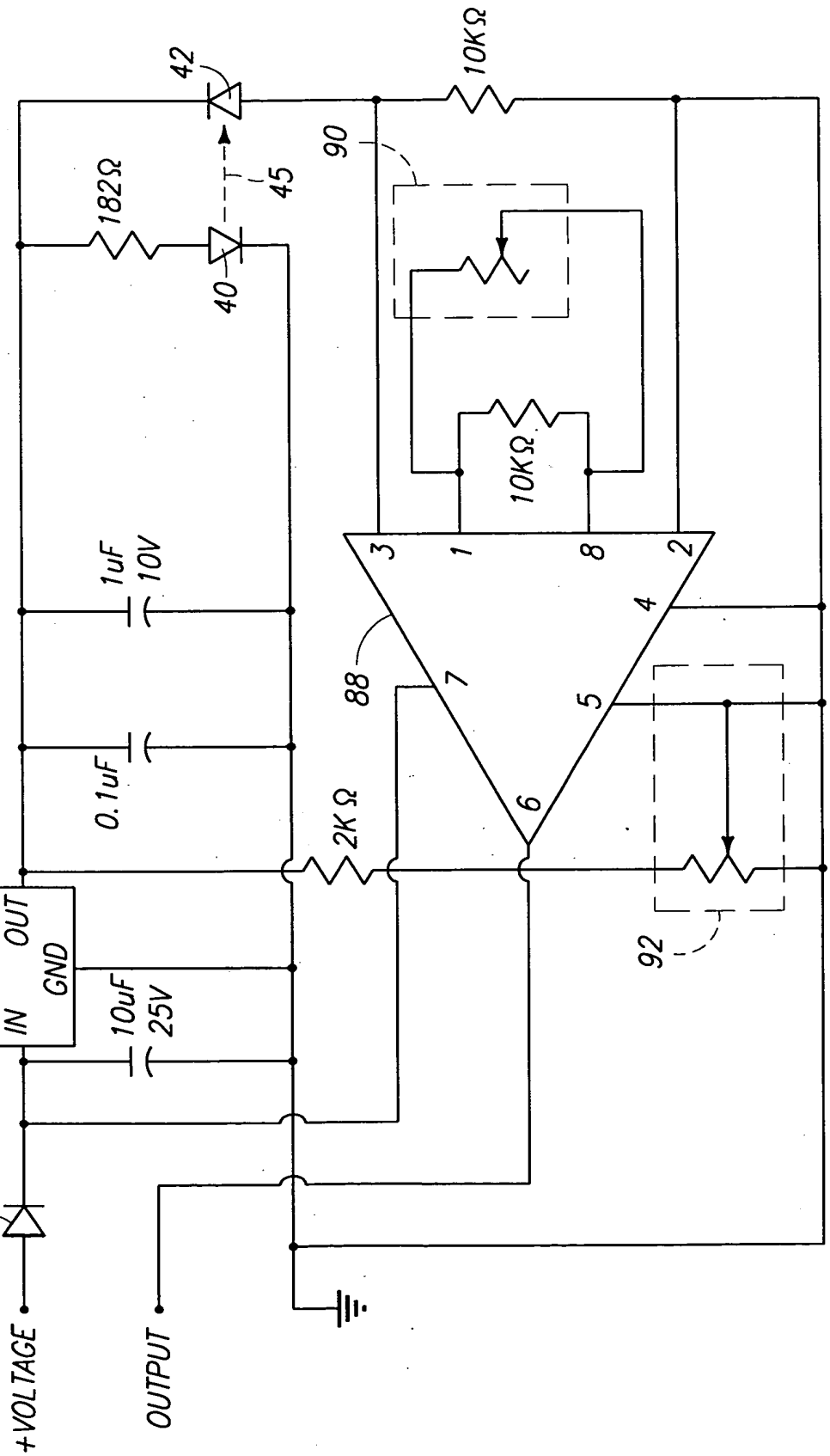

42
10KΩ
90
182Ω
45
40
10KΩ
1uF
10V
0.1uF
2K Ω
88
3
1
8
2
4
7
5
6
86
OUT
GND
IN
10uF
25V
92
94
+VOLTAGE
OUTPUT

Fig 11

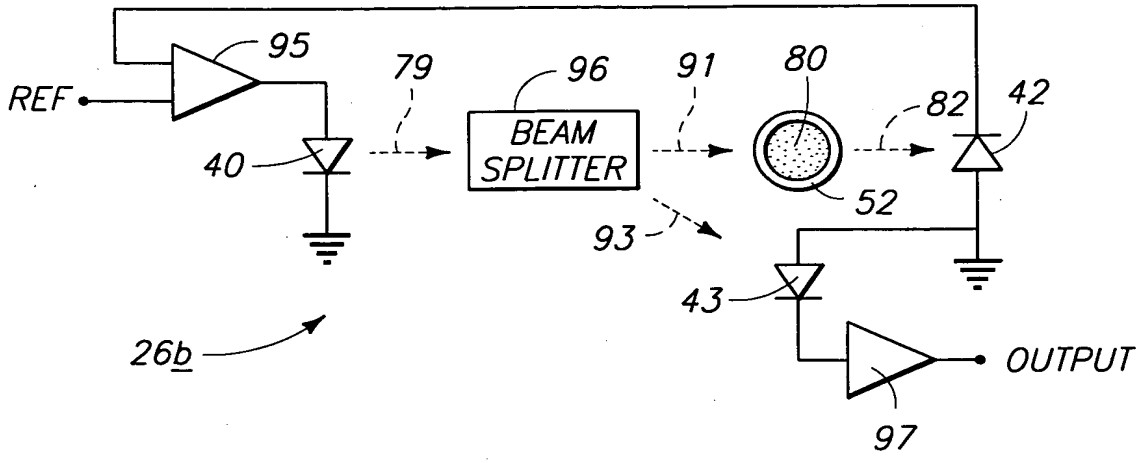

REF
95
79
96
BEAM SPLITTER
91
80
82
42
40
52
93
43
26b
OUTPUT
97

Fig. 10

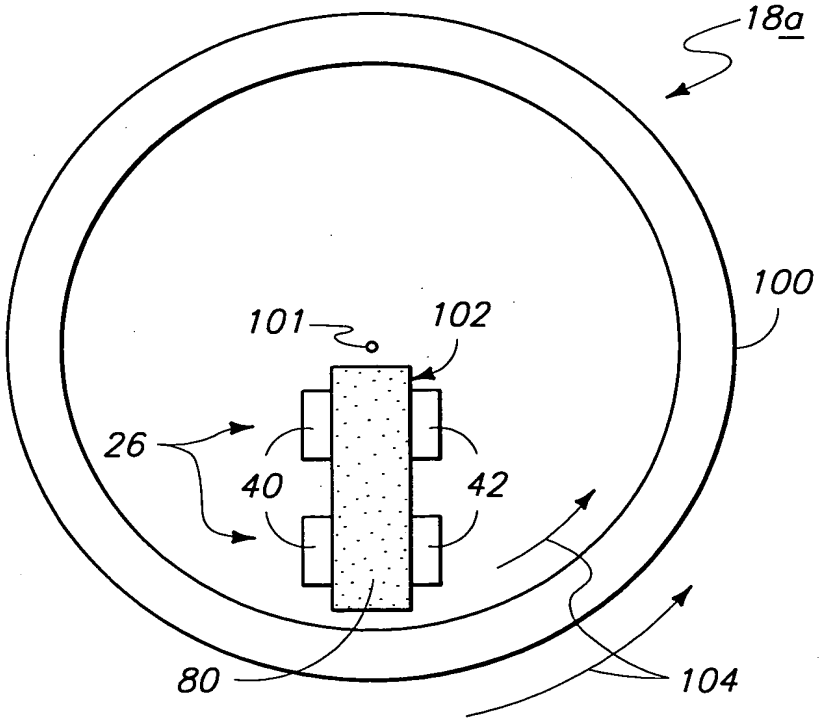

18a
100
101
102
26
40
42
80
104

Fig. 11

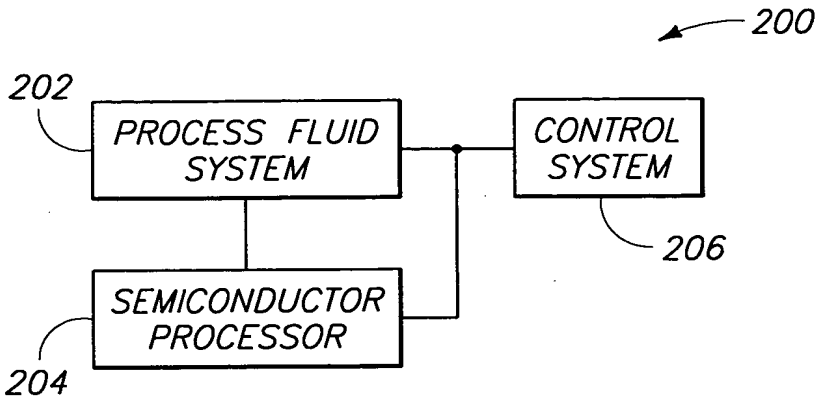

200
202
PROCESS FLUID SYSTEM
CONTROL SYSTEM
206
SEMICONDUCTOR PROCESSOR
204

Fig 12

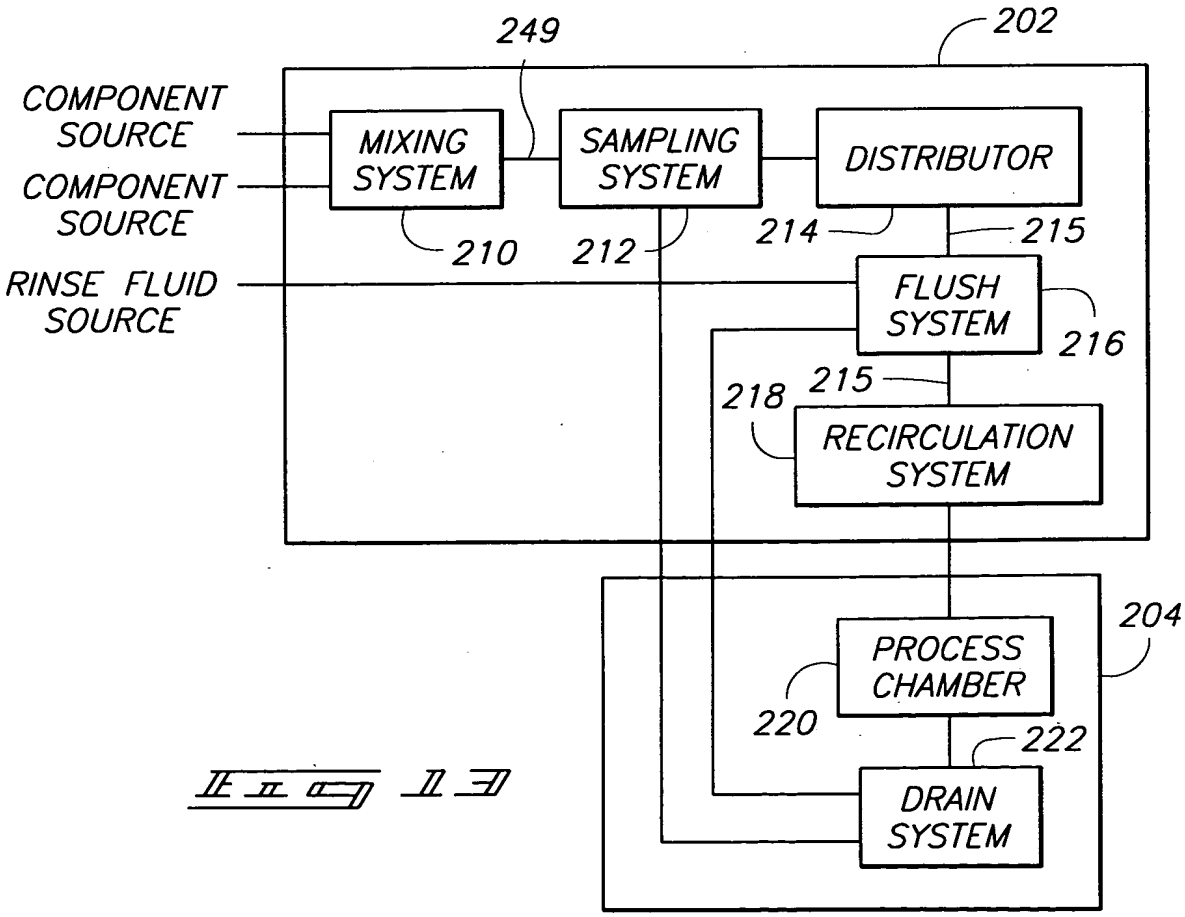

249
202
COMPONENT SOURCE
COMPONENT SOURCE
RINSE FLUID SOURCE
MIXING SYSTEM
SAMPLING SYSTEM
DISTRIBUTOR
210
212
214
215
FLUSH SYSTEM
216
218
215
RECIRCULATION SYSTEM
204
PROCESS CHAMBER
220
222
DRAIN SYSTEM

Fig 13

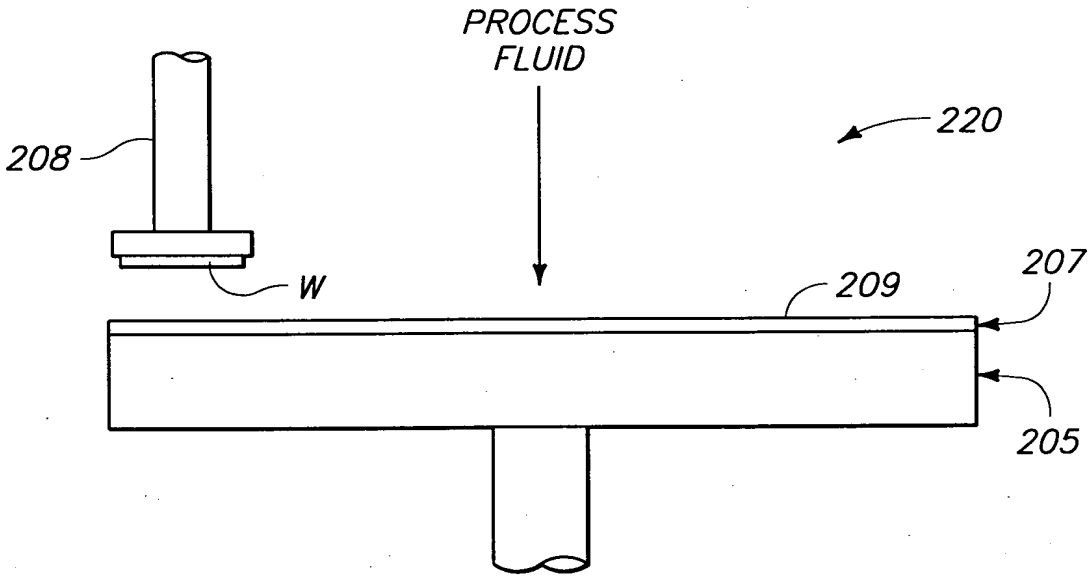


Fig 14

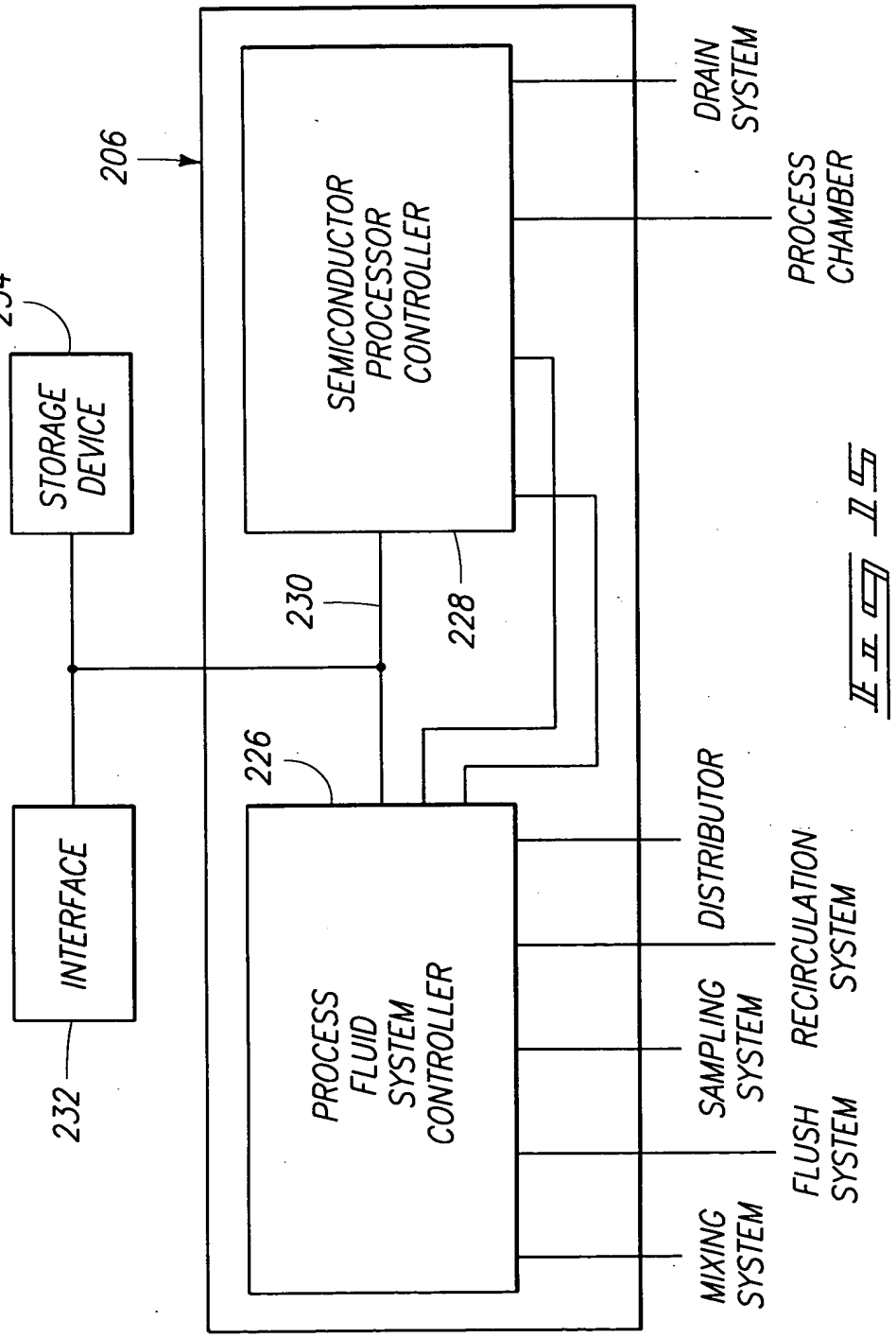

206
234
STORAGE DEVICE
INTERFACE
232
SEMICONDUCTOR PROCESSOR CONTROLLER
230
228
226
PROCESS FLUID SYSTEM CONTROLLER
DRAIN SYSTEM
PROCESS CHAMBER
DISTRIBUTOR
RECIRCULATION SYSTEM
SAMPLING SYSTEM
FLUSH SYSTEM
MIXING SYSTEM

FIG 11

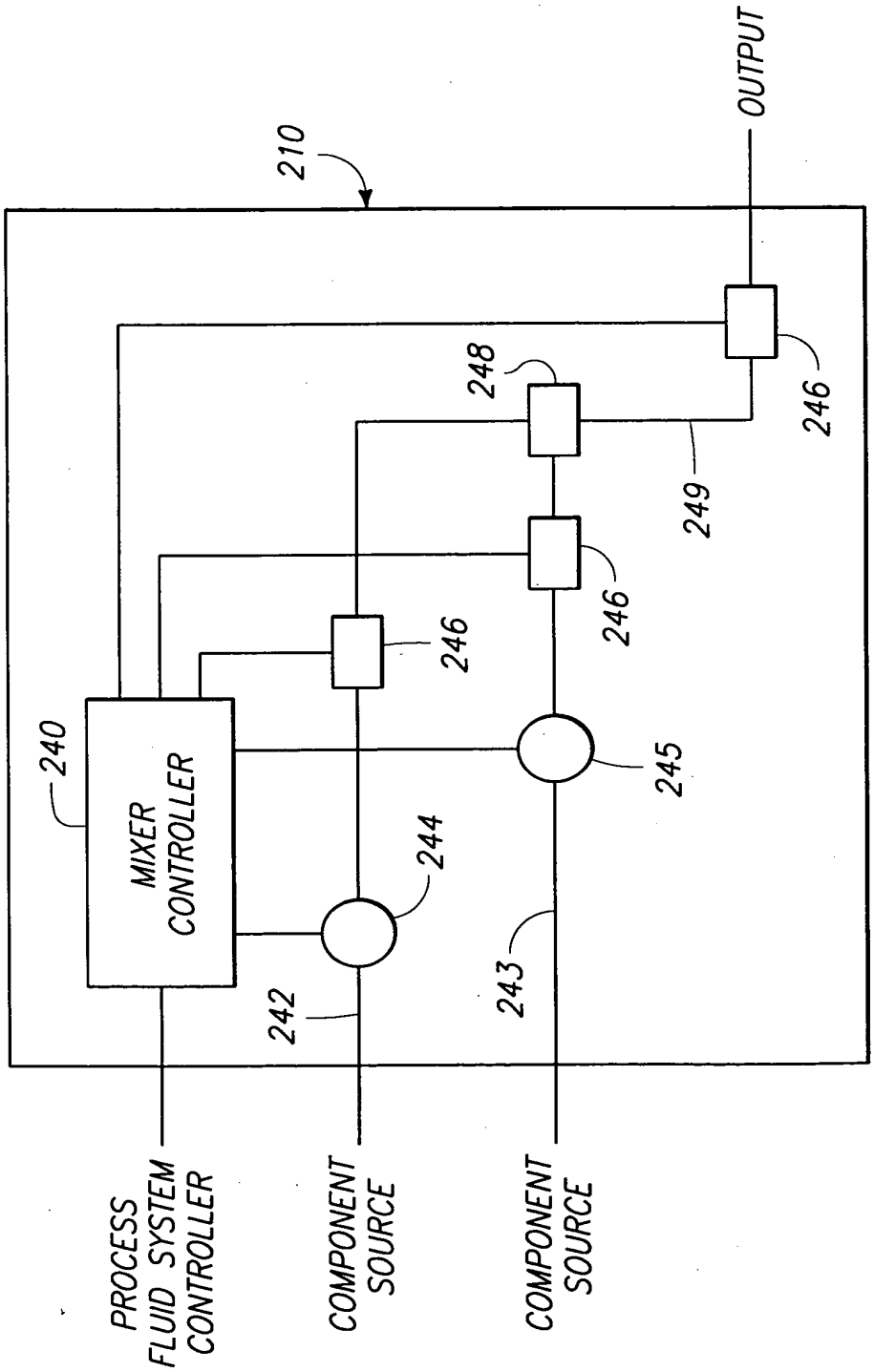

210
OUTPUT
240
MIXER CONTROLLER
244
245
246
246
246
248
249
242
243
PROCESS FLUID SYSTEM CONTROLLER
COMPONENT SOURCE
COMPONENT SOURCE

FIG 11

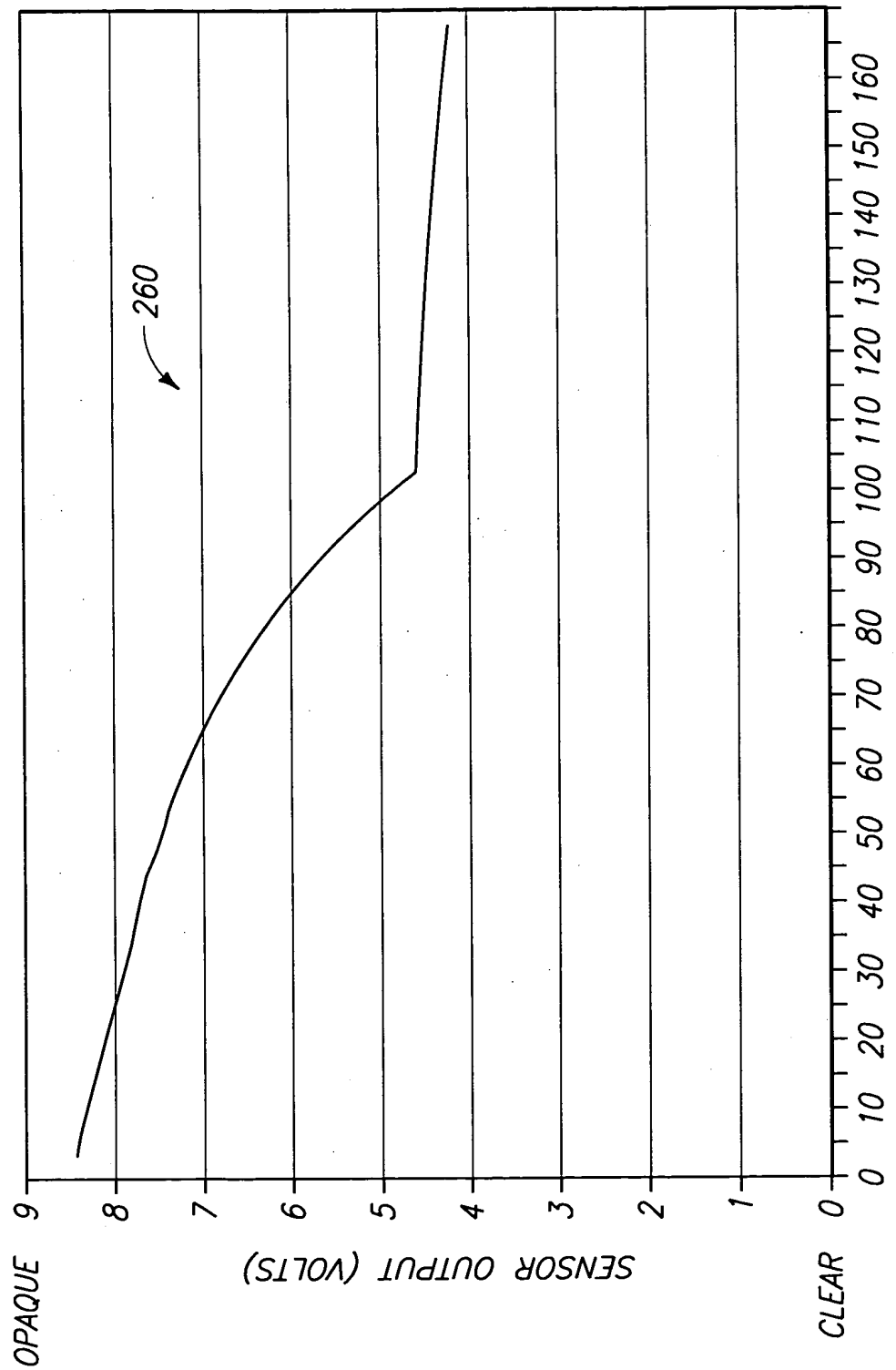

260
OPAQUE
CLEAR
SENSOR OUTPUT (VOLTS)
9
8
7
6
5
4
3
2
1
0
0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160
TIME (MINUTES)

FIG. 11

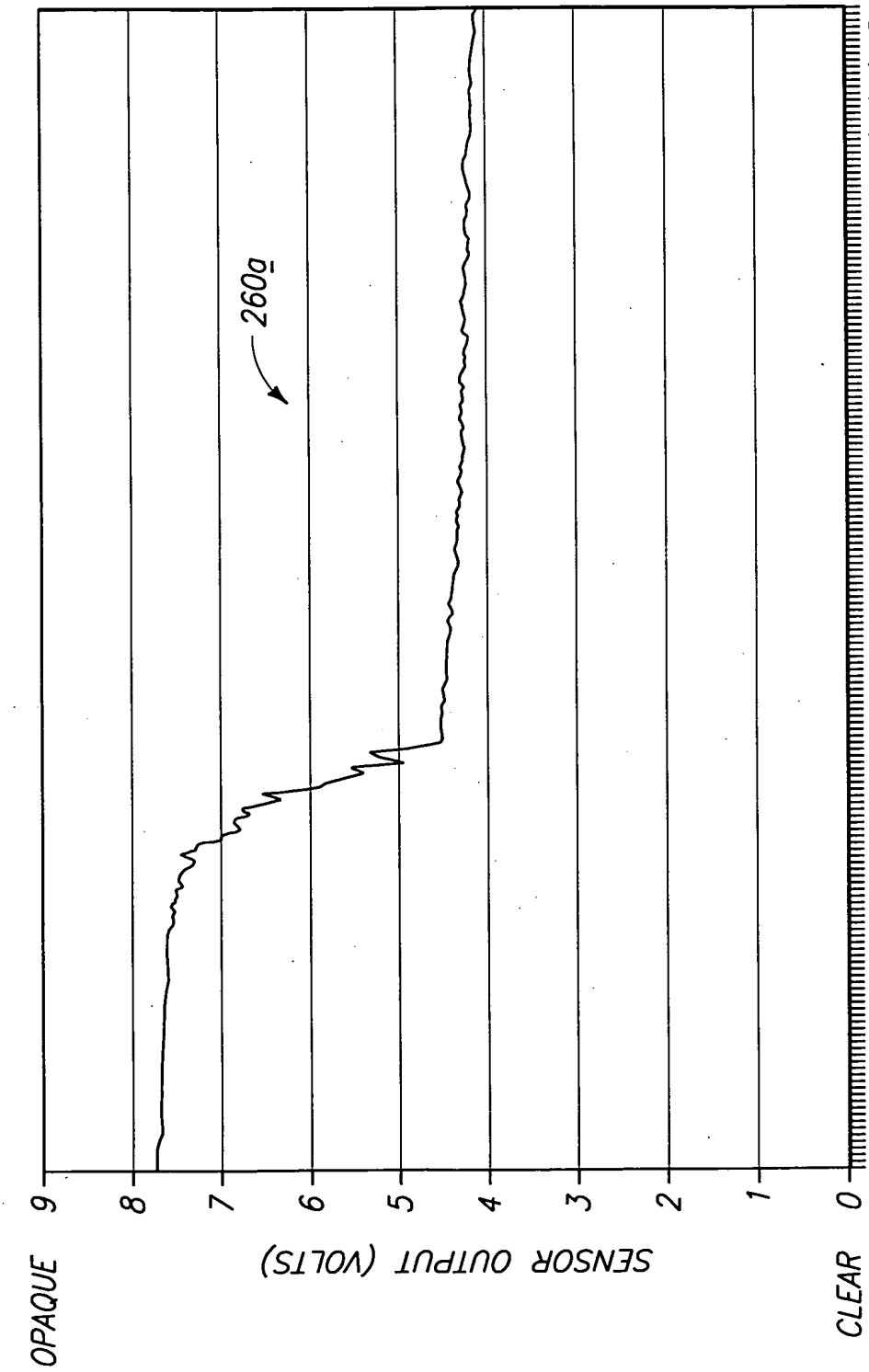

OPAQUE
CLEAR
SENSOR OUTPUT (VOLTS)
9
8
7
6
5
4
3
2
1
0
260a
2
16
30
44
58
72
86
100
114
128
142
156
170
184
198
212
226
240
254
268
282
296
310
324
338
352
366
380
394
408
422
436
450
TIME (SECONDS)

FIG 11

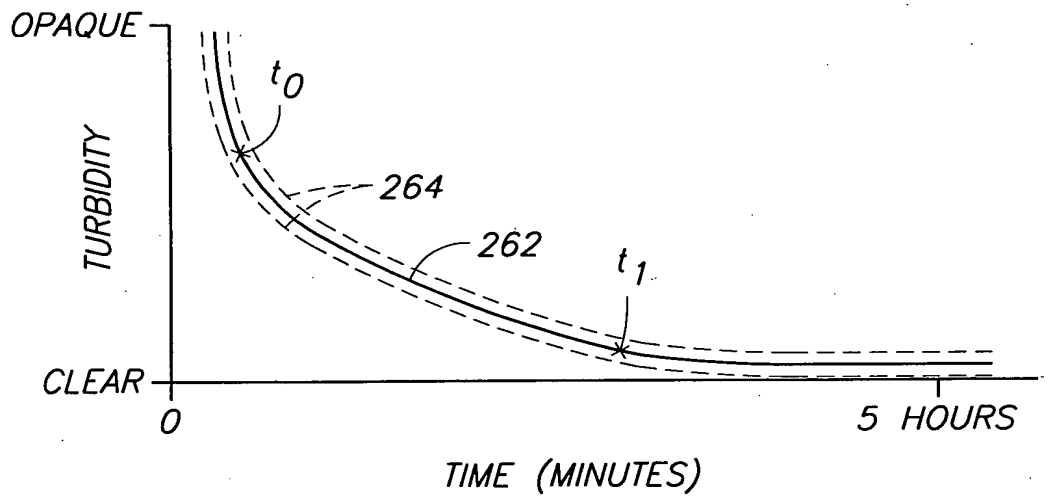

OPAQUE
TURBIDITY
CLEAR
0
t_0
264
262
t_1
5 HOURS
TIME (MINUTES)

Fig 19

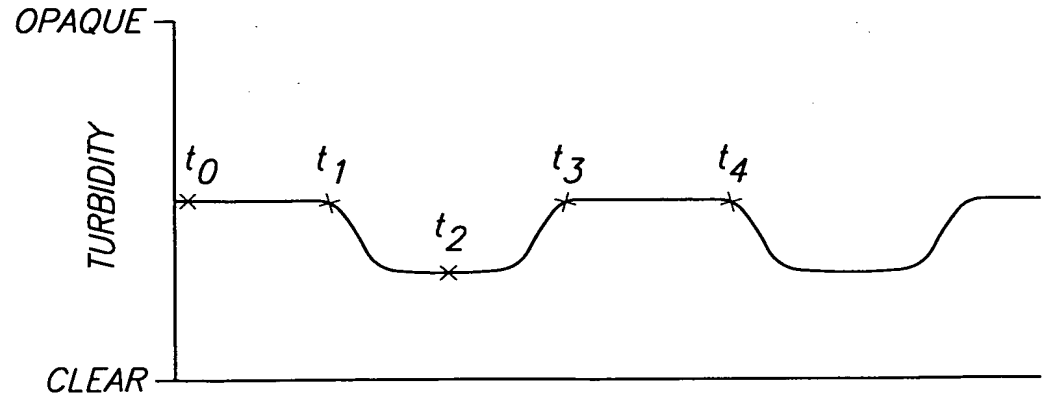

OPAQUE
TURBIDITY
CLEAR
t_0
t_1
t_2
t_3
t_4
TIME

Fig 20

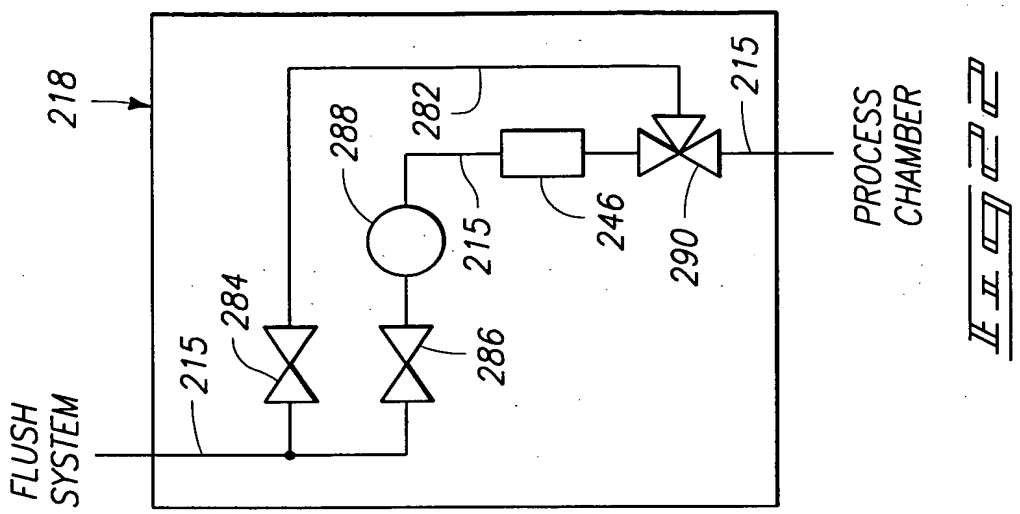

218
288
282
215
246
290
PROCESS CHAMBER
215
284
286
FLUSH SYSTEM

Fig. 22

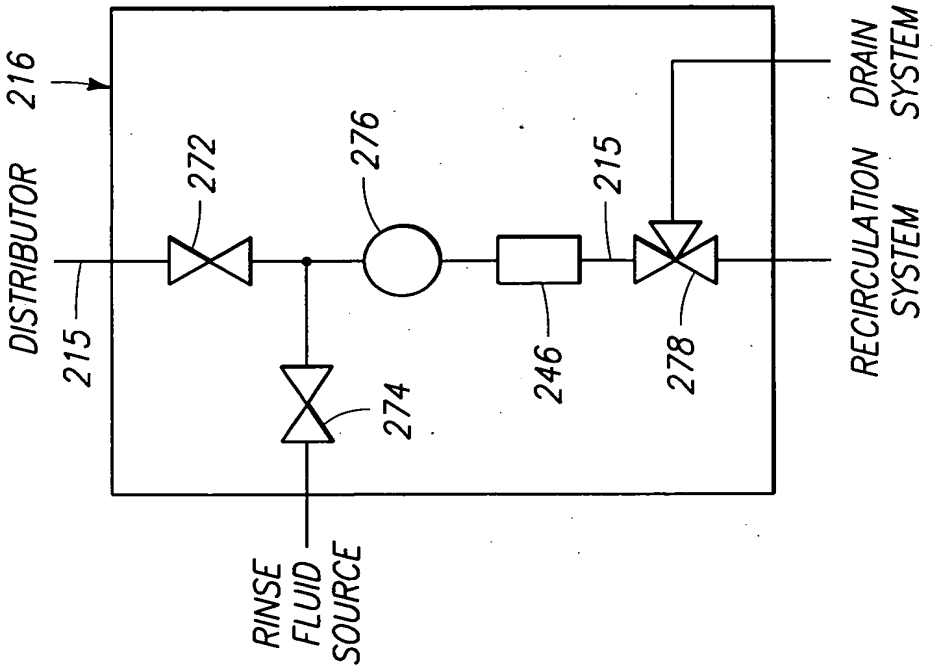

216
DISTRIBUTOR
215
272
276
215
DRAIN SYSTEM
RECIRCULATION SYSTEM
246
278
274
RINSE FLUID SOURCE

Fig. 21

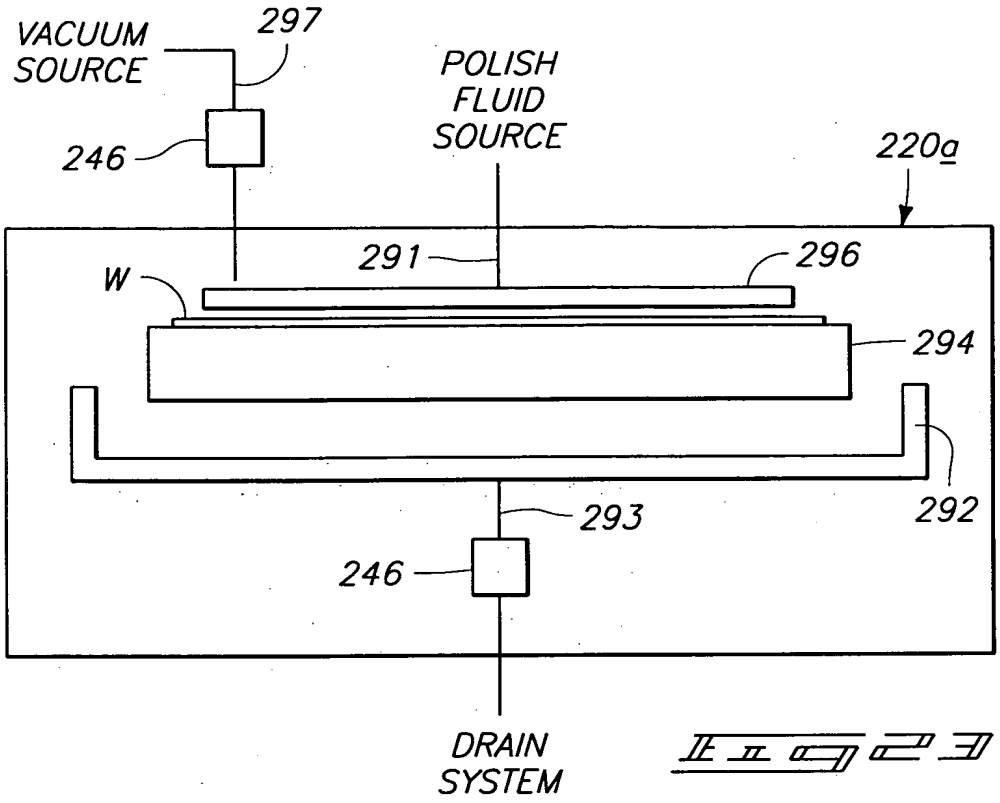

VACUUM SOURCE
297
246
POLISH FLUID SOURCE
220a
291
296
W
294
292
293
246
DRAIN SYSTEM

Fig 23

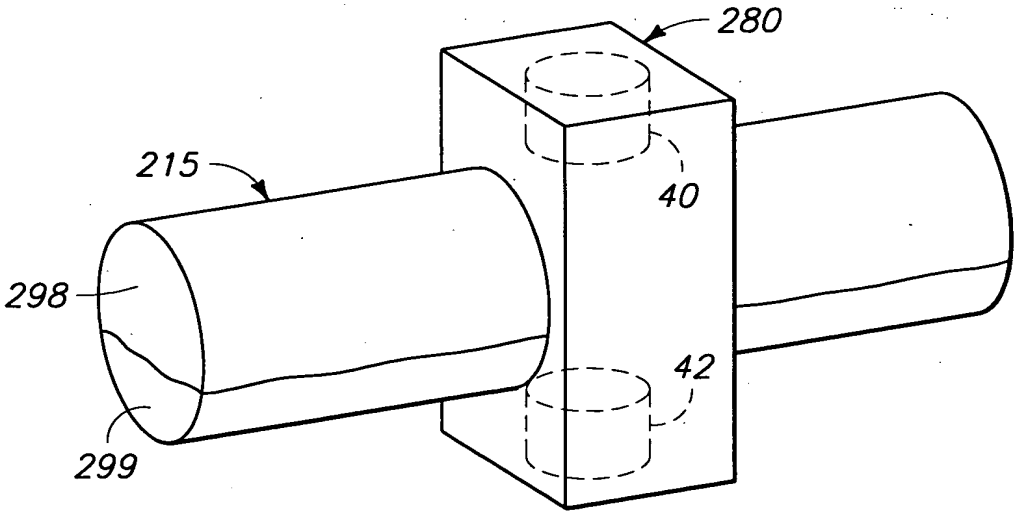

280
215
40
298
42
299

Fig 24

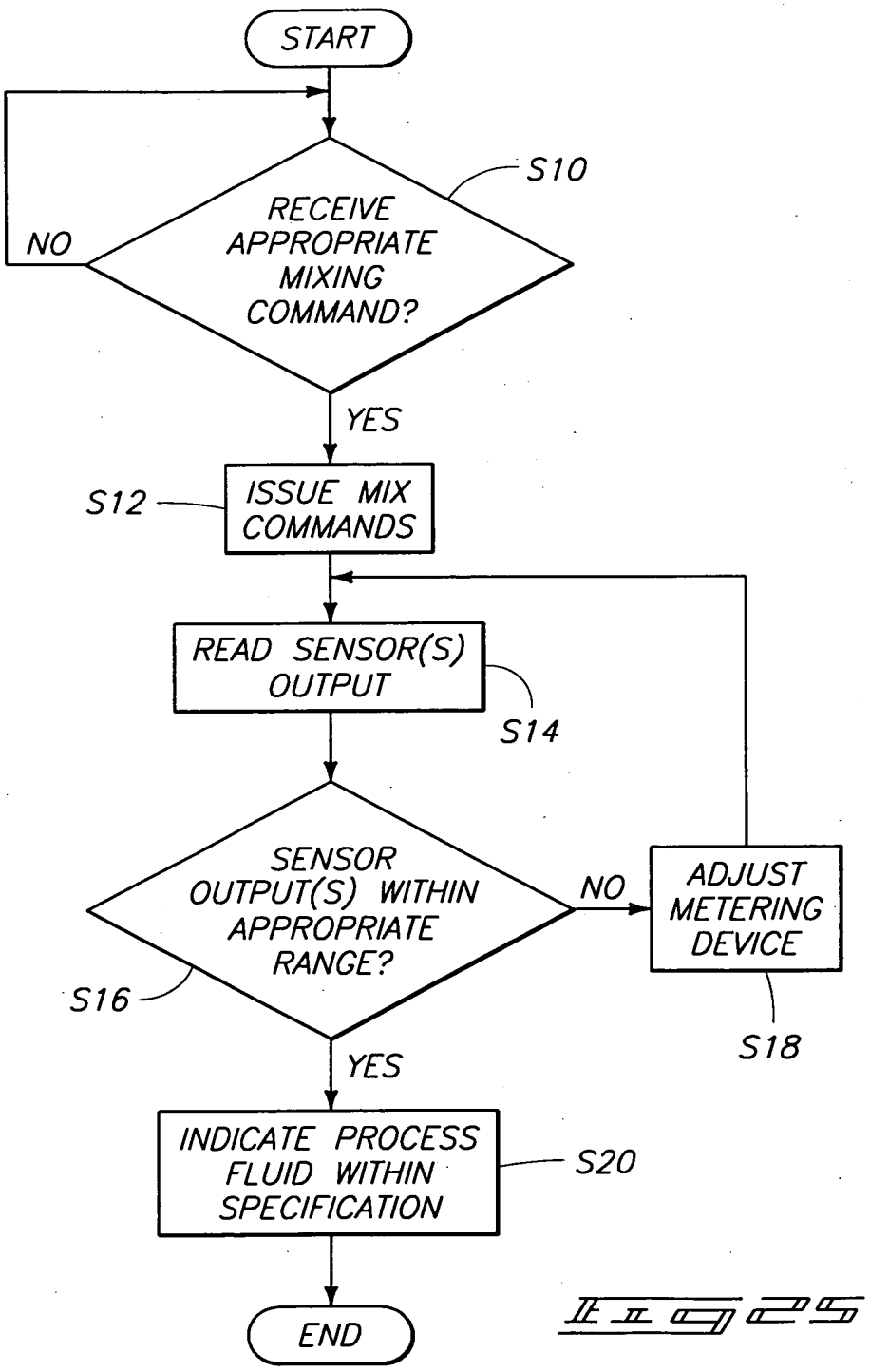

START
S10
RECEIVE APPROPRIATE MIXING COMMAND?
NO
YES
S12
ISSUE MIX COMMANDS
READ SENSOR(S) OUTPUT
S14
SENSOR OUTPUT(S) WITHIN APPROPRIATE RANGE?
S16
NO
ADJUST METERING DEVICE
S18
YES
INDICATE PROCESS FLUID WITHIN SPECIFICATION
S20
END

Fig 25

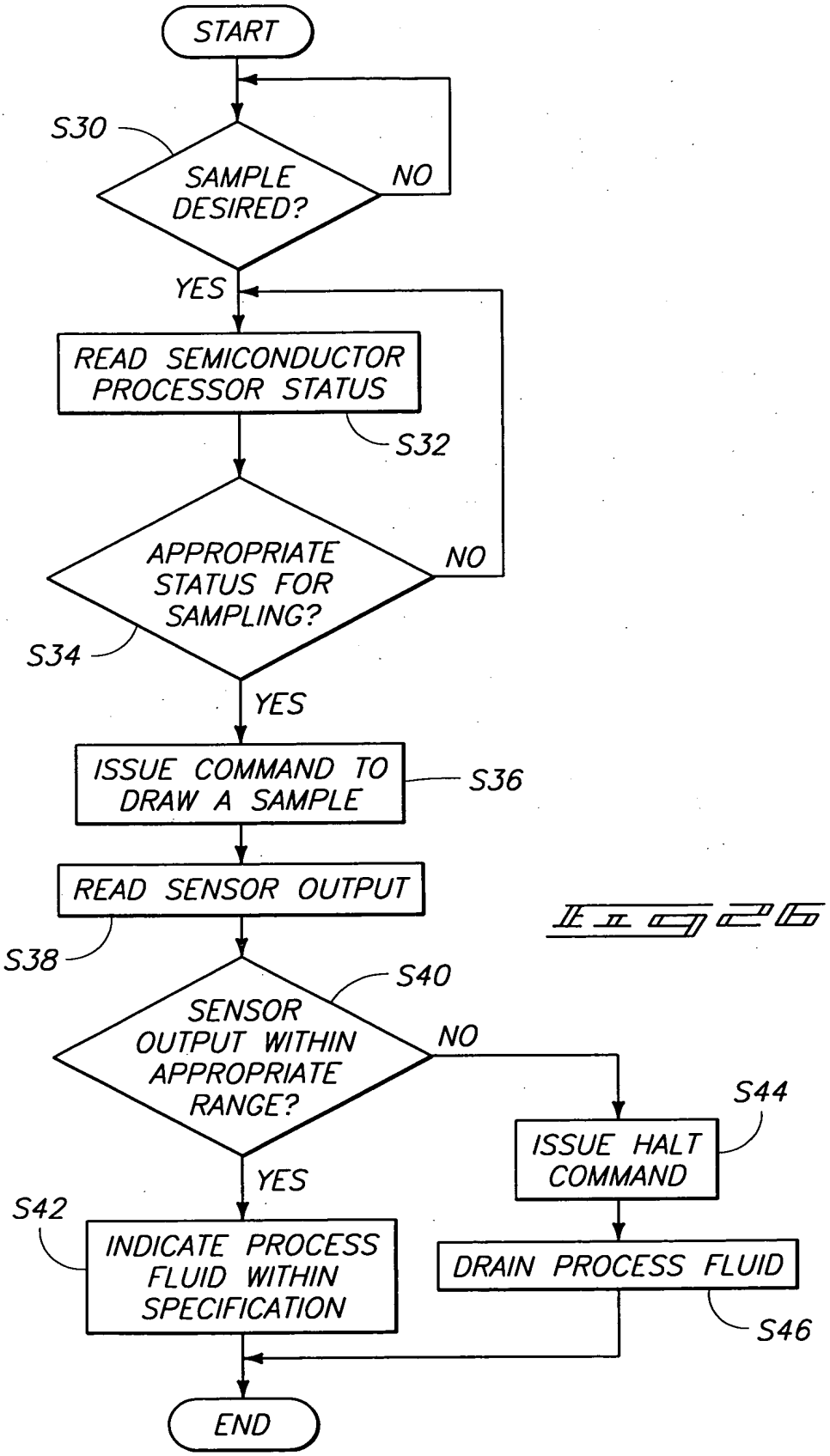

START
S30
SAMPLE DESIRED?
NO
YES
READ SEMICONDUCTOR PROCESSOR STATUS
S32
APPROPRIATE STATUS FOR SAMPLING?
NO
S34
YES
ISSUE COMMAND TO DRAW A SAMPLE
S36
READ SENSOR OUTPUT
S38
S40
SENSOR OUTPUT WITHIN APPROPRIATE RANGE?
NO
S44
ISSUE HALT COMMAND
YES
S42
INDICATE PROCESS FLUID WITHIN SPECIFICATION
DRAIN PROCESS FLUID
S46
END

Fig 2B

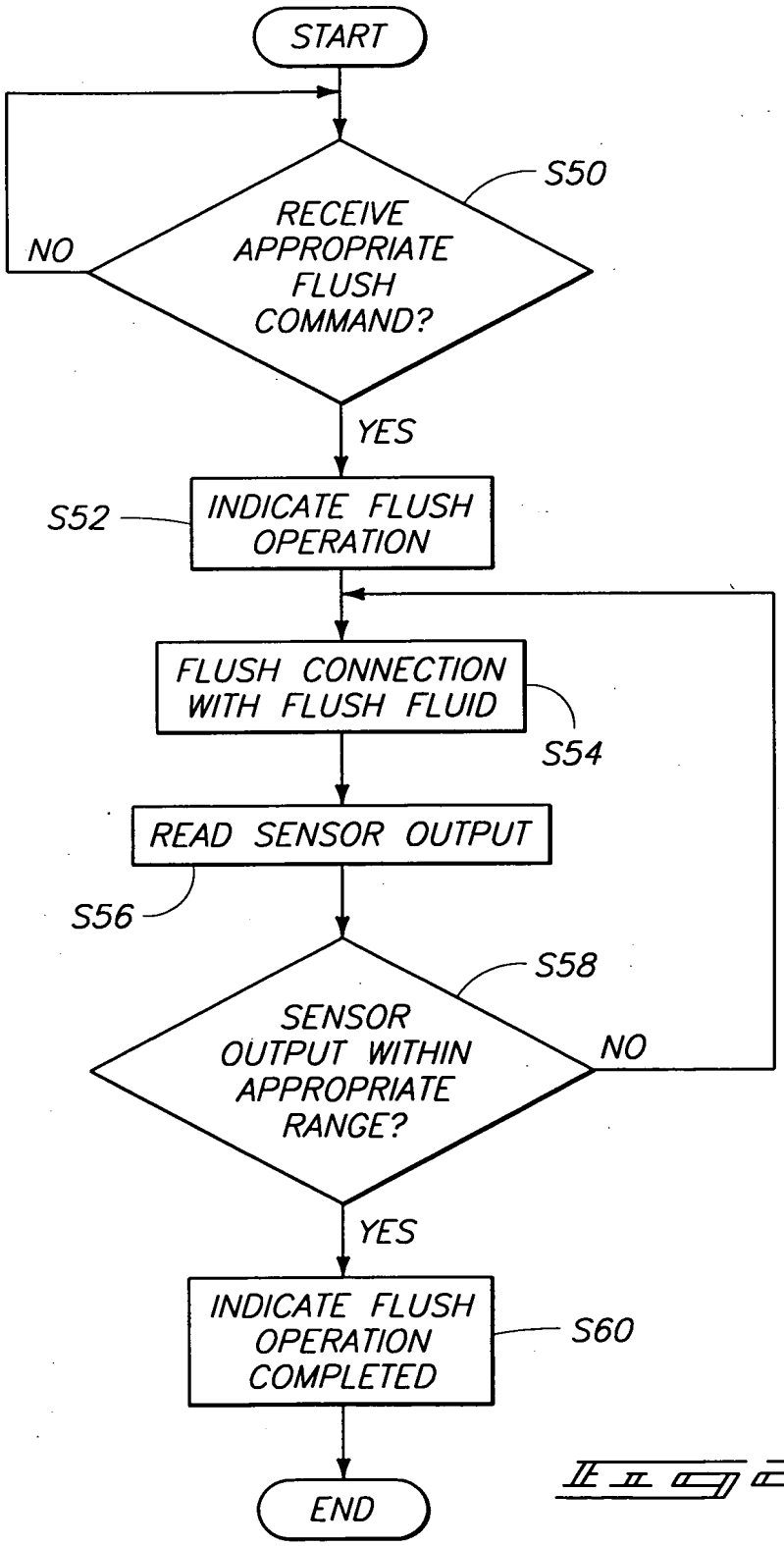

START
S50
RECEIVE APPROPRIATE FLUSH COMMAND?
NO
YES
S52
INDICATE FLUSH OPERATION
FLUSH CONNECTION WITH FLUSH FLUID
S54
READ SENSOR OUTPUT
S56
S58
SENSOR OUTPUT WITHIN APPROPRIATE RANGE?
NO
YES
INDICATE FLUSH OPERATION COMPLETED
S60
END

Fig 2A

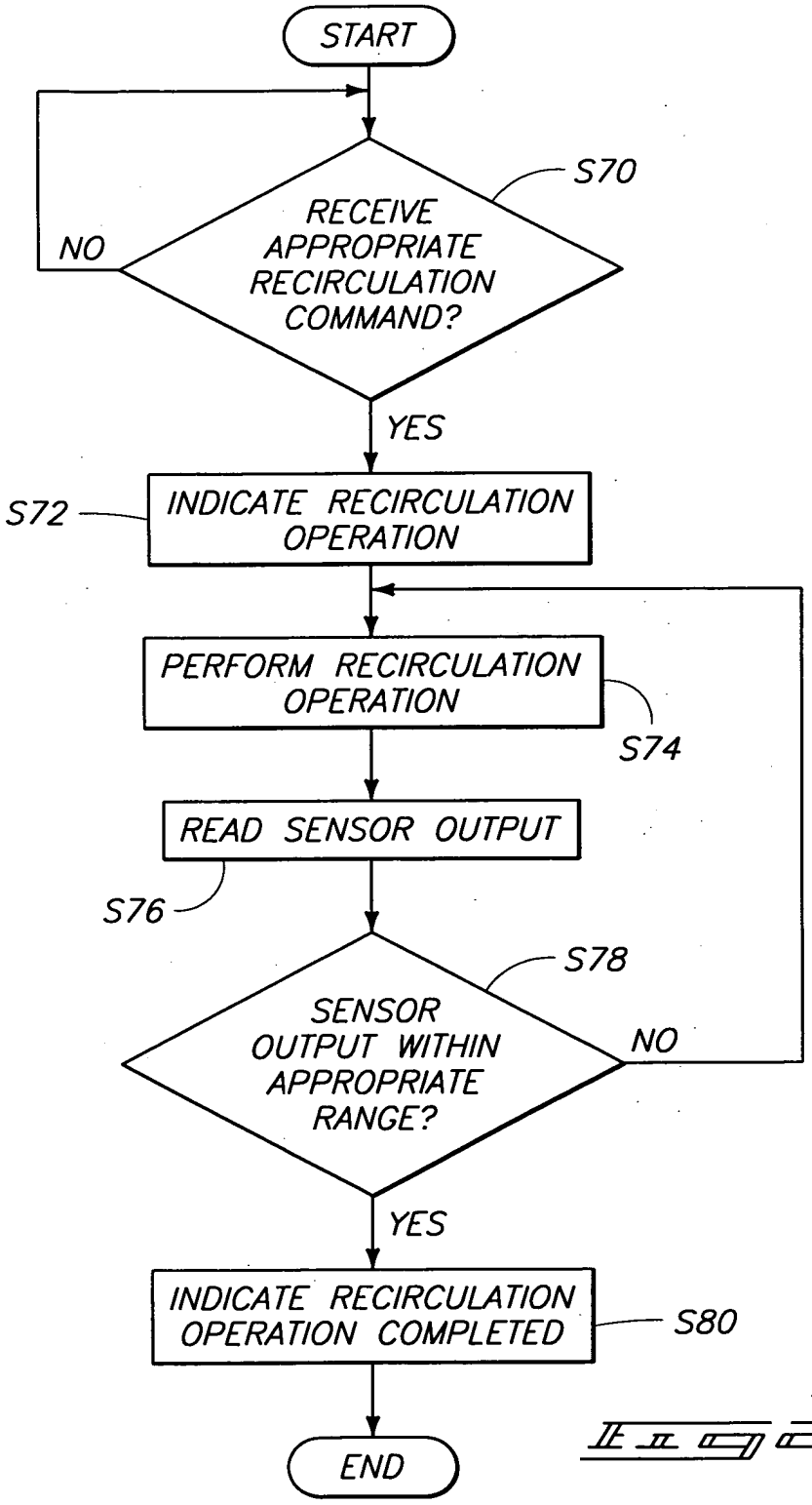

START
S70
RECEIVE APPROPRIATE RECIRCULATION COMMAND?
NO
YES
S72
INDICATE RECIRCULATION OPERATION
PERFORM RECIRCULATION OPERATION
S74
READ SENSOR OUTPUT
S76
S78
SENSOR OUTPUT WITHIN APPROPRIATE RANGE?
NO
YES
INDICATE RECIRCULATION OPERATION COMPLETED
S80
END

Fig 28

AS FILED

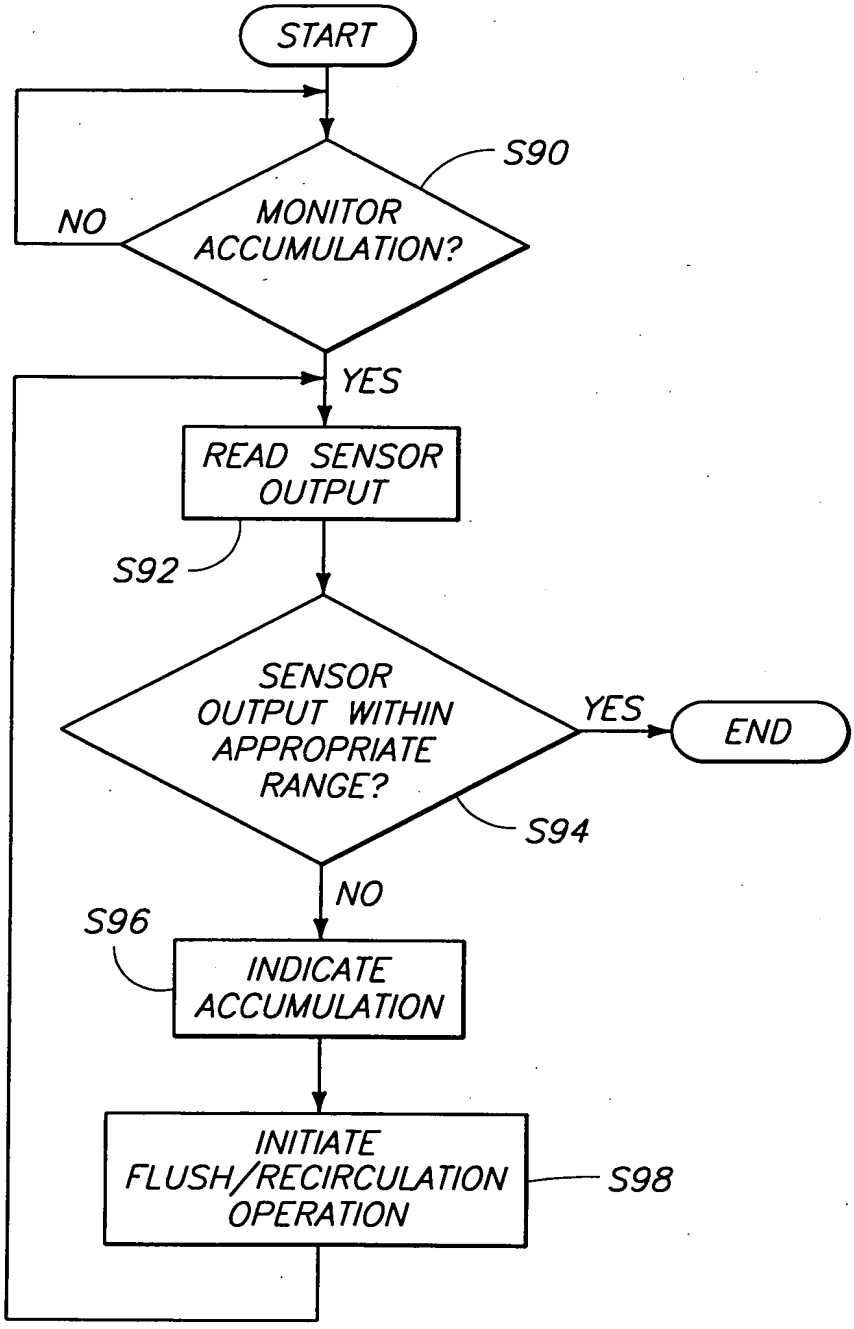


Fig 29